The Genus Menecles Stål (Hemiptera; Pentatomidae)

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Abstract: A diagnosis is given for the genus Menecles, M. insertus (Say) is redescribed, and a new species of the genus described from Texas.

Key words: Pentatominae, Pentatomini, new species, genitalia, stinkbug.

Menecles has been monotypic until now, represented by the widely distributed North American species, M. insertus (Say). This species is redescribed to emphasize the many differences between it and a new species from the Big Bend region of Texas. A diagnosis of Menecles is provided to facilitate its recognition among pentatomine genera.

MENECLES STÅL

STÅL, 1867, OFV. SVENSKA VET.-AK. FORH. XXIV NO. 7 P. 527

Body oval, sides subparallel, moderately convex dorsally, more strongly so ventrally. Head inserted deeply into thorax, basal third to half of eyes lying behind imaginary line connecting apex of anterolateral pronotal angles (Fig. 1). Apex of pronotum wider than head, on each side extending laterad of head by about $\frac{1}{2}$ diameter of eye, behind vertex of head emarginate to depth subequal to $\frac{1}{4}$ maximum length of pronotum; anterolateral pronotal margins weakly convex, entire, explanate; humeri broadly rounded, not produced. Apical margin of corium extending obliquely posterolaterad from apex of scutellum to acute angle. Bucculae evanescent at base of head, subequal in length to first rostral segment. Subspatulate ostiolar rugae short, elevated at apex. Tibiae sulcate. Abdomen without tubercle or spine.

Menecles insertus (Say, 1832)

Pentatoma insertus Say, 1832, Desc. Het. Hem. p. 6

Menecles insertus; Stâl, 1867, Ofv. Svenska Vet.-Ak. Forh. XXIV no. 7 p. 527; Blatchley, 1926, Het. p. 145 (desc.); Baker, 1931, Can. J. Res. 4(3): 199, 200 figs. 109–112 (genitalia); Froeschner, 1941, Amer. Mid. Nat. 26: 138 (biol. note); McDonald, 1966, Quaes. Ent. 2: 27, 111 figs. 232–6 (genitalia)

Menecles incertus; Van Duzee, 1904, Trans. Amer. Ent. Soc. XXX p. 52 (laps. cal.)

Dorsum with narrow, impunctate, median line extending from anterior margin of pronotum onto basal disk of scutellum, otherwise rather closely, uniformly punctate with black on sordid yellow to light castaneous background. Ventral surfaces concolorous with dorsum, punctation black, on head and thorax moderately dense, on abdomen dense, usually accretive; a large, median, black spot on each abdominal segment and pygophore, occasionally obsolete on first or first two basal segments, elongated among males on apical segment and pygophore, among females on apical two segments. Length 11.7 to 12.9 mm.

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Width and length of head subequal, 2.5 to 2.6 mm. wide across eyes. Basal three and proximal portion of fourth antennae segments concolorous with head, distal portion of fourth and all of fifth fuscous; fourth segment perceptibly flattened; length of segments 0.6 to 0.7; 0.8 to 1.0; 1.1 to 1.3; 1.0 to 1.3; 1.6 to 1.7 mm., fifth segment substantially longer than fourth.

Pronotum 2.4 to 2.9 mm. long at meson, 2.5 to 2.7 times as wide at humeri. Length of scutellum about $\frac{1}{10}$ longer than width at base, 4.5 to 5.0 mm. long; clustered punctures in basal angles forming small, shallow fovea; membrane of hemelytra slightly brown, transparent, with reticulate venation. Connexivum rather broadly exposed, punctate with black, marked at basal and usually apical angles of each segment with large, diffuse, black spot.

Mesosternum largely covered on each side of median carina by subquadrate black spot. Legs dotted with black. Incisures at margin of abdomen bordered by diffuse black spot. Spiracles black.

Emargination of posterior margin of pygophore broad, sinuous, moderately deep, exposing inferior ridge from caudal view (Fig. 3). Proctiger with heavy, transverse, preapical ridge (Fig. 2). Cephalic margin of parameres subacutely produced above broad, shallow cup; apical hook somewhat triangular, finely denticulate on inner surface (Fig. 4). Lateral lobes of theca strongly produced laterad, not at all caudad (Fig. 6). Conjunctiva with long dorsal appendage, multiple lobes ventrally, none sclerotized at apex; median penal lobes quite large (Fig. 5).

Menecles portacrus, n. sp.

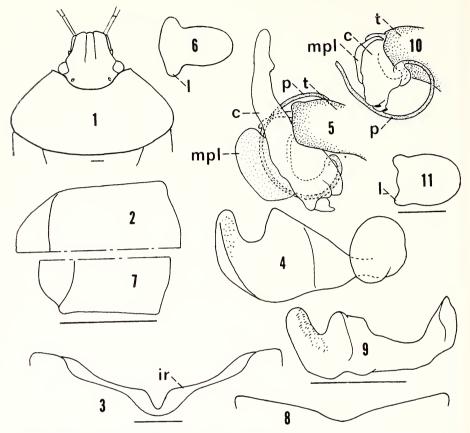
Dorsum bearing cross of two, narrow, impunctate lines, one traversing pronotum between humeri, other dividing pronotum along meson, usually continuing caudad onto basal disk of scutellum, extending cephalad as sparsely punctate fascia across vertex of head onto tylus; background yellowish brown with numerous darker spots on corium, punctured rather closely and uniformly with fuscous to black. Sordid yellow beneath, abdomen faintly tinged with orange and finely flecked with red; punctures mostly concolorous or dilute fuscous, of moderate size on head and thorax, nearly obscure on abdomen. Length 10.8 to 11.8 mm.

Head slightly broader than long, 2.5 to 2.7 mm. wide across eyes. Antennae sordid yellow marked with black dots on lateral surface of basal segment, these dots coalescing toward apex into streak; second segment streaked along lateral surface and circled at apex with black; distal $\frac{1}{2}$ of third, distal $\frac{2}{3}$ of fourth and fifth segments black; length of segments 0.6 to 0.7; 0.9 to 1.2; 1.0 to 1.3; 1.2 to 1.3; 1.4 to 1.5 mm.; fifth segment barely longer than fourth.

Pronotum 2.7 to 2.8 mm. long at meson, 2.4 to 2.5 times as wide across humeri. Width of scutellum at base subequal to length, 4.3 to 4.6 mm. long; punctures clustered in basal angles but not forming distinct fovea. Membrane of hemelytra brownish, transparent; veins simple or branched, occasionally forming cell. Moderately exposed connexivum fuscous with very margin, marginal spot in middle of each segment and punctures dark yellowish brown.

Thorax with five black spots on each side, one at base of each subcoxa, one on mesopleuron near distal end of supracoxal cleft, one on anterior border of propleuron behind eye. Sterna concolorous with pleura. Legs dotted with black. Submarginal row of two or four dots on most or all abdominal sternites; incisures immaculate; spiracles black.

Emargination of posterior margin of pygophore broad, shallow, V-shaped, not exposing inferior ridge from caudal view (Fig. 8). Preapical ridge of proctiger curving basad between obscurely developed tubercles (Fig. 7). Cephalic margin of parameres truncately produced basad of cup; cylindrical apical hook clearly striated on inner surface (Fig. 9). Lateral lobes of theca produced weakly laterad, more strongly caudad (Fig. 11); conjunctiva



FIGS. 1, 7–11. *M.* portacrus, n. sp. FIG. 1. Head and pronotum. FIG. 7. Proctiger, right half. FIG. 8. Posterior margin of pygophore, caudal view. FIG. 9. Right paramere. FIG. 10. Theca and related structures, lateral aspect; conjunctiva (c), median penal lobe (mpl), penisfilum (p), theca (t). FIG. 11. Theca, dorsal aspect; lateral lobe (1).

FIGS. 2-6. *M. insertus.* FIG. 2. Proctiger, left half. FIG. 3. Posterior margin of pygophore, caudal view; inferior ridge (ir). FIG. 4. Right paramere. FIG. 5. Theca and related structures, lateral aspect; conjunctiva (c), median penal lobes (mpl), penisfilum (p), theca (t). FIG. 6. Theca, dorsal aspect; lateral lobe (1).

bilobed on each side, each lobe terminating in small, dark, apical plate; median penal lobes of moderate size (Fig. 10).

TYPES. Holotype, male, labeled Lost Mines Trail, Big Bend Natl. Pk., Brewster Co., Tex. VII-14-50, 5800 ft., Ray F. Smith. Deposited in American Museum of Natural History. Rostrum damaged.

Paratypes, 3 females: The Basin, Big Bend National Park, Texas, VIII-15-1968. J. E. Hafernik (author's coll.); Green Gulch, Big Bend National Park, Texas, 5700 ft., July 24, 1968. J. E. Hafernik (Texas A&M Univ.); Chisos. M., IX-19-38, Tex. (b) D. J. & J. N. Knull Collrs. (Ohio State Univ.)

Literature Cited

- BAKER, ALEX. D. 1931. A study of the male genitalia of Canadian species of Pentatomidae. Canadian J. Research, 4: 148–220.
- BLATCHLEY, W. S. 1926. Heteroptera of Eastern North America. Nature Publishing Co., Indianapolis, 1116 pp.
- FROESCHNER, R. C. 1941. Contributions to a synopsis of the Hemiptera of Missouri. Pt. 1. American Midland Naturalist, **26**: 122–146.
- McDONALD, F. J. D. 1966. The genitalia of North American Pentatomoidea (Hemiptera; Heteroptera). Quaestiones Entomologicae, 2: 7–150.
- SAY, THOMAS. 1832. Descriptions of New Species of Heteropterous Hemiptera of North America. New Harmony. 39 pp.
- STÅL, C. 1867. Bidrag till hemipterernas systematik. Ofversigt af Kongliga Svenska Vetenskaps-Akademiens Forhandlingar 14 no. 7: 491–560.
- VAN DUZEE, EDWARD P. 1904. Annotated list of the Pentatomidae, recorded from America north of Mexico, with descriptions of some new species. Trans. Amer. Entomol. Soc., **30**: 1-80.